

Applicant : Stefan J. Burmeister
Serial No. : 09/800,543
Filed : March 6, 2001
Page : 2 of 5

Attorney's Docket No.: 12754-143001 / 01P7507US

REMARKS

Claims 1-3, 5, 6, 8-11, 18-20, 22-25, and 27-33 are pending. No claims are allowed.

Rejections under section 103

Claims 1-3, 5, 6, 8-11, 18-20, 22-25, and 27-33 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over US Patent No. 5, 812,582 to Gilliland et al. ("Gilliland") in view of US Patent No. 5,757,829 to Jiang et al. ("Jiang") and US Patent No. 5,905,750 to Lebby et al. ("Lebby").

Claim 1 recites an apparatus for coupling optical power into a fiber. The apparatus includes a first VCSEL having a first optical power output and a second VCSEL coupled in parallel therewith, the second VCSEL having a second optical power output that is proportional to but different from the first optical power output of the first VCSEL.

Gilliland discloses a single VCSEL in a can package. Jiang discloses a second VCSEL whose emission is generally identical to the emission of the first VCSEL (Col. 1, lines 55-63). Thus Gilliland and Jiang do not disclose or suggest a second VCSEL having a second optical power output that is different from a first optical power output of the first VCSEL, as recited in the claim. The Examiner points to Lebby for the missing subject matter. Lebby is equally lacking.

Lebby discloses a VCSEL 14, a second VCSEL, and "laser emissions from the second VCSEL, similar to those of VCSEL 14" (col. 4, lines 40-45). The claim, however, explicitly calls for different optical power outputs. According to standard dictionaries, such as Merriam-Webster Online Dictionary 2003 (<http://www.merriam-webster.com>), "different" means "dissimilar," that is, not similar. Since "similar" and "dissimilar" are opposites, the "similar" emissions of Lebby cannot disclose or suggest different (i.e., dissimilar) optical power outputs. Because the cited references do not disclose or suggest the above limitation, *no prima facie*

Applicant : Stefan J. Burmeister
Serial No. : 09/800,543
Filed : March 6, 2001
Page : 3 of 5

Attorney's Docket No.: 12754-143001 / 01P7507US

obviousness has been established, and claim 1 should be allowed. Claims 2, 3, 5, 6, 8-11, 30 and 31 are dependent claims depending from claim 1, and are allowable for at least the same reasons.

Furthermore, claim 30 recites that the second optical power output is a percentage of the first optical power output, and claim 31 recites that the second optical power output is a multiple of the first optical power output. The Examiner states that it "would have been obvious to have a percentage or multiple, since where the general conditions of a claim are disclose[d] in the prior art, discovering the optimum or workable ranges involves only routine skill in the art."

However, a particular parameter must first be recognized as a variable which achieves a recognized result before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antoine*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) (See also MPEP 2144.05 II B.) Neither of the cited references discloses or suggests that a ratio of the first and second optical power outputs can be varied to achieve a recognized result. Jiang and Lebby disclose only substantially identical (i.e., similar) laser emissions. Therefore, no *prima facie* obviousness has been established, and claims 30 and 31 are in allowable form.

Claim 18 recites a VCSEL component for driving a fiber optic. The VCSEL component includes a first VCSEL having a first optical power output and a second VCSEL having a second optical power output that is different from the first optical power output. As discussed above with reference to claim 1, the references do not disclose or suggest the above limitation. Therefore, no *prima facie* obviousness has been established, and claim 18 should be allowed over the cited combination. Claims 19, 20, 32 and 33 are dependent claims depending from claim 18, and are allowable for at least the same reasons.

Claim 22 recites a method for fabricating a device capable of coupling optical power into a fiber. The method includes coupling in parallel a first VCSEL having a first optical power output and a second VCSEL having a second optical power output that is different from the first optical power output. As discussed above with reference to claim 1, the references do not disclose or suggest the above limitation. Therefore, no *prima facie* obviousness has been

Applicant : Stefan J. Burmeister
Serial No. : 09/800,543
Filed : March 6, 2001
Page : 4 of 5

Attorney's Docket No.: 12754-143001 / 01P7507US

established, and claim 22 should be allowed over the cited combination. Claims 23-25 are dependent claims depending from claim 22, and are allowable for at least the same reasons.

Claim 27 recites a method for coupling optical power into a fiber. The method includes coupling in parallel a first VCSEL having a first optical power output and a second VCSEL having a second optical power output that is proportional to but different from the first optical power output. As discussed above with reference to claim 1, the references do not disclose or suggest the above limitation. Therefore, no *prima facie* obviousness has been established, and claim 27 should be allowed over the cited combination. Claim 28 is a dependent claim depending from claim 27, and should be allowed for at least the same reasons.

Claim 29 recites a method for coupling optical power into a fiber. The method includes monitoring a first optical power output of a first VCSEL by separately monitoring a second optical power output of a second VCSEL, the second optical power output being proportional to but different from the first optical power output. As discussed above with reference to claim 1, the references do not disclose or suggest the above limitation. Therefore, no *prima facie* obviousness has been established, and claim 29 should be allowed over the cited combination.

Applicant does not believe any fees are due; however please apply any outstanding charges or credits to Deposit Account No. 06-1050.

Ferenc Pazmandi has been given limited recognition under 37 CFR § 10.9(b) as an employee of the Fish & Richardson PC law firm to prepare and prosecute patent applications

Applicant : Stefan J. Burmeister
Serial No. : 09/800,543
Filed : March 6, 2001
Page : 5 of 5

Attorney's Docket N. : 12754-143001 / 01P7507US

wherein the patent applicant is a client of Fish & Richardson PC and the attorney or agent of record in the applications is a registered practitioner who is a member of Fish & Richardson, which is the case in the present application. A copy of the Limited Recognition document, which expires December 6, 2003, is attached hereto.

Date: 11/17/2003

Respectfully submitted,



Ferenc Pazmandi
Limited Recognition under 37 CFR § 10.9(b)

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